

ABSTRACT

A cooling water pipe (1) is deformed so as to have outlet openings (4, 5, 6) respectively placed in a position around a fuel injection nozzle (2) and in a position between ports (3), and the cooling water pipe 1 is inserted to be placed inside the cylinder head. Thereby, the position around the fuel injection nozzle (2) and the position between the ports (3) can be simultaneously and efficiently cooled, and the structure becomes simpler and the production becomes easier. In order to deform the cooling water pipe (1), for example, the cooling water pipe (1) is bent first, and subsequently bulge forming by hydraulic pressure is performed. Preferably, the cooling water pipe (1) is made of aluminum. Thereby, the cooling water pipe (1) becomes easier to melt into when the cylinder head is cast.